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ATLONA

12x2 and 16x2 HDMI Switch

AT-HD-V12x2 and AT-HD-V16x2

AT-HD-V12x2

AT-HD-V16x2

User Manual

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INTRODUCTION

Atlona AT-HD-V12x2 and AT-HD-V16x2 are High Performance HDMI switchers. The Atlona 12x2 and 16x2 switchers are equipped with HDMI re-clocking technology which allows user to use long distance HDMI cables on the inputs and output.

The 12x2 and 16x2 HDMI switchers are based on the latest HDMI IC and therefore capable of fully displaying uncompressed digital video with resolutions up to 1920x1200 or 1080p along with High Resolution Audio up to Dolby True HD and DTS master and full 3D.

The Atlona 12 by 2 and 16 by 2 HDMI switchers are featured with a dual HDMI output (non-matrix). Both outputs are active and will only output the same exact content at all the time (second output is duplicating the first). Main advantage is to connect TV and Projector for the conference rooms or TV and AVR for Residential applications.

Both Switchers are controllable though front panel, IR remote or RS232 interface.

APPLICATIONS

Conference/Board-room: As HDMI interface becoming more and more popular, most computers, DVD players, media servers, cables boxes, etc… are now equipped with HDMI interfaces. It is very common that a good size board-room or a conference room will need 12 or even 16 hdmi inputs to be able to connect all of the sources needed. The switchers are equipped with a dual HDMI (non-matrix) outputs which will allow user to connect both a TV and a Projector at the same time. Both models are featured with RS232 and IR controls, which allows a use of a 3rd party control system to switch between inputs.

QA: DVD player, Computer, Media Server companies would certainly need at least 12 or 16 hdmi input switchers to be able to test their equipment either before product shipment or during RMA procedures. The Atlona HD-V12x2 or 16x2 are perfect for such an application as they are fully capable of passing highest resolutions up to 1920x1200 or 1080p, latest audio formats up to Dolby True HD and DTS-Master and even all 3D formats.

PACKAGE CONTENTS

- 1 x AT-HD-V12x2 or AT-HD-V16x2
- Set of Rack Ears
- 1 x 12v Power supply (Universal 110/240V)
- RS232 Cable
- IR Cable
- 1 x Instructions manual

FEATURES

- Supports Extremely high resolutions up to 1920x1200 or 1080p
- Dual HDMI Output (non-matrix), allows user to connect 2 displays at the same time or a display and AVR
- Supports Latest Digital Audio Formats up to Dolby True HD and DTS master
- Full 3D Support, supports all 7 available formats
- HDCP and EDID compliant
- IR Controllable
- RS232 Controllable, perfect for users who are utilizing 3rd party control system
- Re-Clocking Technology for both inputs and output
- CEC pass-though
- Plug and Play
- Supports 30/36/48 bit color depth display.
- Rack Mountable (1U)

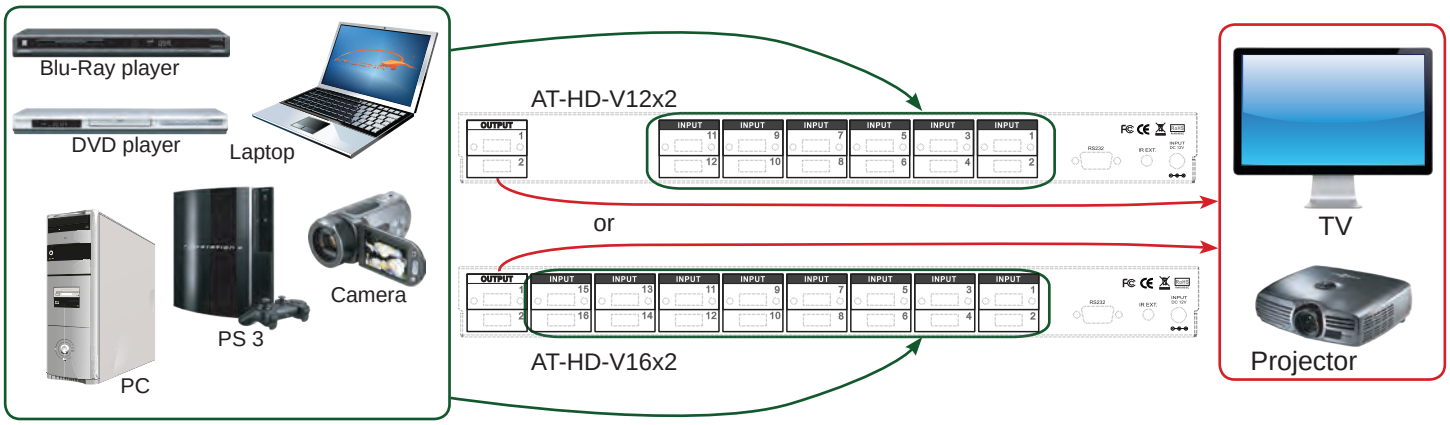
Note: Both switchers could be used with DVI sources and displays, the DVI to HDMI adapter will be required.

SPECIFICATIONS

	AT-HD-V12x2	AT-HD-V16x2
Inputs	12 x HDMI (Type A female)	16 x HDMI (Type A female)
Outputs	2 x HDMI (Type A female)	2 x HDMI (Type A female)
Frequency bandwidth	6.75Gbps	
Resolutions	up to 1080p or 1920x1200	
3D	Supports all 7 x 3D formats	
Color depth	up to 48bit	
HDCP Compliant	HDCP 2.0	
IR	IR input (1/8-inch) or IR Eye on the front panel	
RS232	DB9 female	
Power supply	12v/2A (universal 110/220v)	
Dimensions (U)	1U	
Dimensions (L x W x H)	17.4 x 8.03 x 1.77(inch) / 442 x 204 x 45(mm)	
Weight(LB)	6.0	7.0
Operation temperature	-5 to +50°C	
Storage temperature	-20 to +60°C	
Operating humidity	0 to 90 % RH (no condensation)	

CONNECTION AND OPERATION

1. Connect an HDMI source such as DVD player, Cable Box, Computer to one of the hdmi inputs on the switch.
2. Connect HDMI output of the switch to the HDMI display (TV or Projector)
3. Connect 12V supplied power supply to the switch.
4. Turn ON the power switch and select an appropriate hdmi input where an active hdmi source is connected.



IR CONTROL

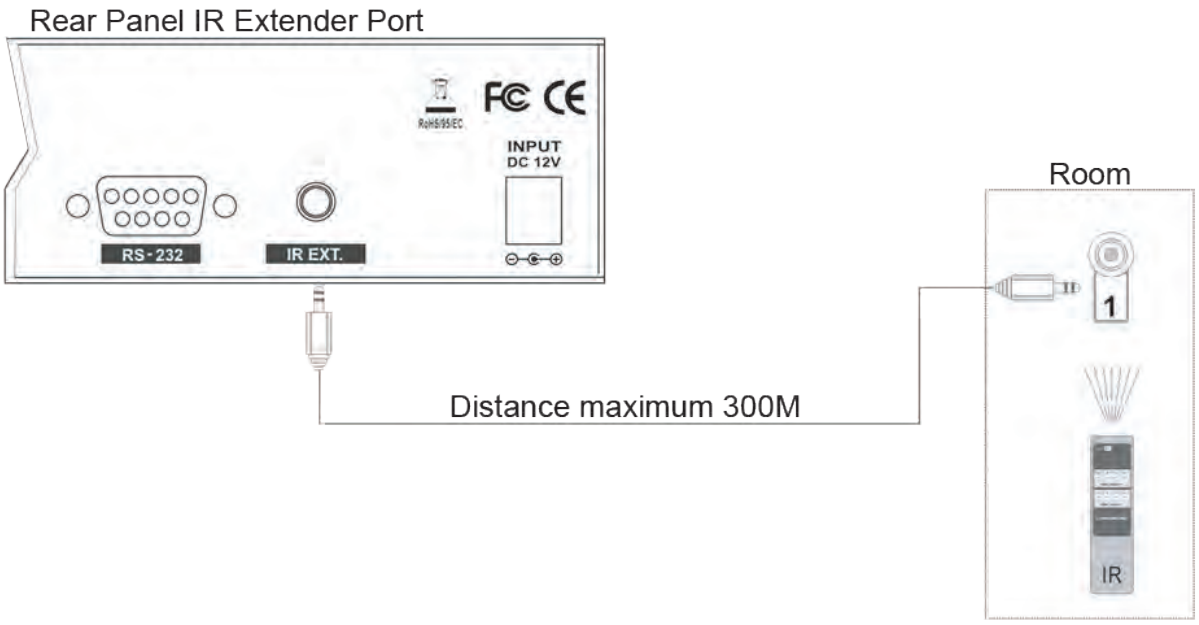
User can choose to point the remote control to the switch if located within 25ft of the switch or extend the IR Eye further away from the switch which will allow user to still control the switch from up to 1000ft away.

IR Remote for 12x2

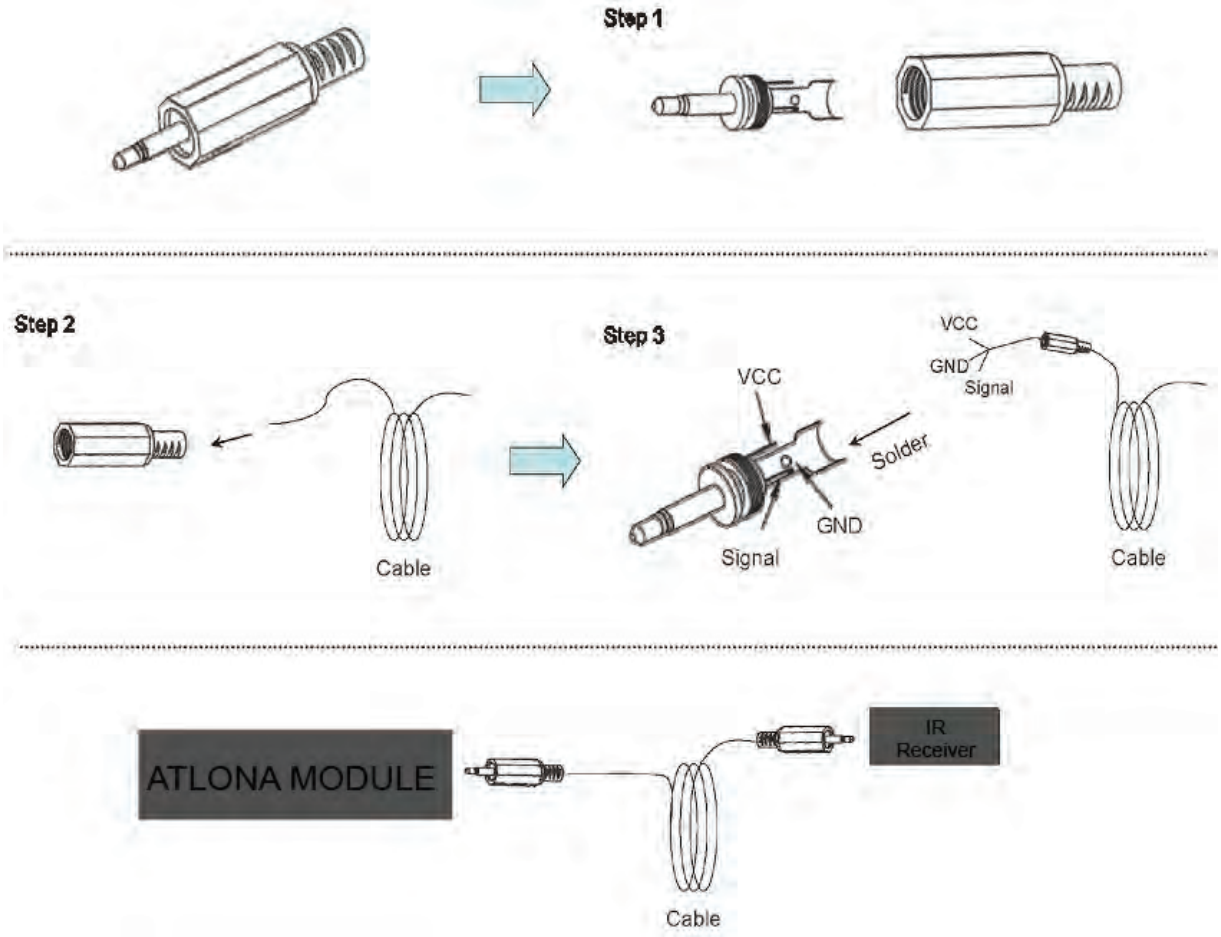
IR Remote for 16x2

IR EXTENDER

1. IR Extender Connection



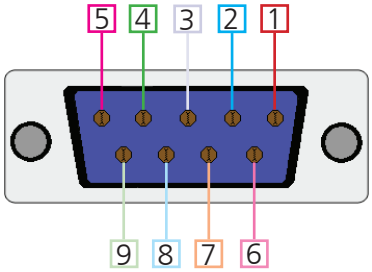
2. IR Extender Package



RS-232

Connection

RS-232 is connected through a 9-pin female D connector. The pins will have functions associated with them, some will be unassigned.



No.	Pin	Function
1	----	Not used
2	Tx	Transmit
3	Rx	Receive
4	----	Not used
5	Gnd	Ground
6	----	Not used
7	----	Not used
8	----	Not used
9	----	Not used

Baud Rate: 9600bps Data Bit: 8bits Parity: None Stop Bit: 1bit

Command

The command codes are very sensitive, do not change capitalization, spacing, or lettering.

Command	Feedback	Description
PWON	PWON	Power on
PWOFF	PWOFF	Power off
All#	All#	Resets all inputs to corresponding outputs (in3 to out3)
x$	**x**$	Turns off output channel (to turn off output 3 = 3$)
xAV**y**	**x**AV**y**	Switch input to output (input 3 to output 5 = 3AV5)
xAV**y**,**z**,**w**	**x**AV**y**,**z**,**w**	Switch input to multiple outputs (input3, output4,5 = 3AV4,5)
Status**x**	**x**AV**y**	Shows what input is connected to selected output
Status	**x**AV**y**, **x**AV**z**, **x**AV**w**, ….	Displays which inputs are currently connected to which outputs
Save[**y**]	Save2	Saves settings for future use, saves vary from 0 to 9
Recall[**y**]	Recall2	Pulls up saved settings for the number you selected
Clear[**y**]	Clear2	Erases the save for the number you selected
Mreset	Mreset	Sets matrix back to the default settings

Each command or feedback is terminated with a carriage return.
Note: **w**, **x**, **y**, and **z** are placeholders for the number of the input or output to be chosen.
Note: If the command fails or is incorrect the feedback should be "Command FAILED"

Safety Information

Safeguards

To reduce the risk of electric shock, do not expose this product to rain or moisture

Do not modify the wall plug. Doing so will void the warranty and safety features.

If the wall plug does not fit into your local power socket, hire an electrician to replace your obsolete socket.

This equipment should be installed near the socket outlet and the device should be easily accessible in the case it requires disconnection.

Precautions

FCC regulations state that any unauthorized changes or modifications to this equipment, not expressly approved by the manufacturer, could void the user's authority to operate this equipment.

Operate this product using only the included external power supply. Use of other power supplies could impair performance, damage the product, or cause fires.

In the event of an electrostatic discharge this device may automatically turn off. If this occurs, unplug the device and plug it back in.

Protect and route power cords so they will not be stepped on or pinched by anything placed on or against them. Be especially careful of plug-ins or cord exit points from this product.

Avoid excessive humidity, sudden temperature changes or temperature extremes.

Keep this product away from wet locations such as bathtubs, sinks, laundries, wet basements, fish tanks, and swimming pools.

Use only accessories recommended by Atlona to avoid fire, shock, or other hazards.

Unplug the product before cleaning. Use a damp cloth for cleaning and **not** cleaning fluid or aerosols. Such products could enter the unit and cause damage, fire, or electric shock. Some substances may also mar the finish of the product.

Never open, remove unit panels, or make any adjustments not described in this manual. Attempting to do so could expose you to dangerous electrical shock or other hazards. It may also cause damage to your AT-HD-V12x2/AT-HD-V16x2. Opening the product will void the warranty.

Do not attempt to service the unit. Disconnect the product and contact your authorized Atlona reseller or contact Atlona directly.

Warranty

Limited Warranty

Atlona Technologies warrants that (a) its products (the AT-HD-V12x2 or AT-HD-V16x2) will perform substantially in accordance with the accompanying written materials for a period of 3 years from the date of receipt and (b) that the product will be free from defects in materials and workmanship under normal use and service for a period of 3 years. In the event applicable law imposes any implied warranties, the implied warranty period is limited to 3 years from the date of receipt. Some jurisdictions do not allow such limitations on duration of an implied warranty, so the above limitation may not apply to customers that fall within those areas.

Customer Remedies

Atlona Technologies' and its suppliers' entire liability and Customer's exclusive remedy shall be, at Atlona Technologies' decision, either return of the price paid for the product, repair, or replacement of the product that does not meet this Limited Warranty and which is returned to Atlona Technologies with a copy of the Customer's receipt. This Limited Warranty is void if failure of the product has resulted from accident, abuse, misapplication, or natural occurrence. In example but not limited to: power surges (electrical storms, local power outage), dropping the product (or items on the product), contact with fluids, and physical misconduct (i.e. kicking or punching). Any replacement product will be warranted for the remainder of the original warranty period.

No other warranties

To the maximum extent permitted by applicable law, Atlona Technologies and its suppliers disclaim all other warranties, either expressed or implied, including, but not limited to, implied warranties of merchantability and fitness for a particular purpose, with regard to the product and any related written materials. This Limited Warranty gives customer specific legal rights. Customers may have other rights depending on the jurisdiction.

No liability for damages

To the maximum extent permitted by applicable law, in no event shall Atlona Technologies or its suppliers be liable for any damages arising out of the use of or inability to use this product, even if Atlona Technologies has been advised of the possibility of such damages. Such damages include but are not limited to: special, incidental, consequential, or indirect damages for personal injury, loss of business profits, business interruption, loss of business information, or any other pecuniary loss. Atlona Technologies' and its suppliers' entire liability under any provision of this agreement shall be limited to the amount actually paid by you for the product. Some Jurisdictions do not allow the exclusion or limitation of liability for consequential or incidental damage. The above limitations may not apply to you in such jurisdictional cases.

Atlona Product Registration

Thank you for purchasing this Atlona product. - We hope you enjoy it and will take an extra few moments to register your new purchase.

Registration creates an ownership record if your product is lost or stolen and helps ensure you'll receive notification of performance issues and firmware updates.

At Atlona, we respect and protect your privacy, assuring you that your registration information is completely secure. Atlona product registration is completely voluntary and failure to register will not diminish your limited warranty rights.

To register go to: http://www.atlona.com/registration